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EXAMINER

SNIDER, THERESA T

ART UNIT PAPER NUMBER

1744

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,160

Applicant(s)

STEGENS, ALFRED H.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12/12/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 20(page 4, line 19), 31a(page 5, line 9), 31b(page 5, line 11), 42(page 5, line 27), 61a(page 7, line 21), 60a(page 7, line 22), 60b(page 7, line 22), 61b(page 7, line 22), 85-93(page 8, line 21), 57(page 8, line 24).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because:

The appropriate reference numerals should be inserted in figs. 3-6 and 13;

Figure 8, '62' in quadrant 58 does not appear to be the correct reference numeral.

Figure 8, '65' does not appear to correspond with the tufts in figure 7 in the same position.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 43(figure 2). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

Exemplary of such:

Page 8, line 26, '96' should be inserted after 'tufts';

Line 28, it is believed '84' should be replaced with '83';

Line 28, it is believed '94' should be replaced with '95'.

Page 9, line 26, it is believed '87' should be replaced with '117';

Line 28, it is believed '124' should be replaced with '127'.

Appropriate correction is required.

Claim Objections

5. Claims 1-17 are objected to because of the following informalities:

Claim 1, line 7, 'Said' should be replaced with 'said'.

Claim 9, line 4, 'in' should be inserted after 'arranged'.

Claim 12, line 2, 'positions..' should be replaced with 'positions.'.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, lines 5 and 7, it is unclear as to what is meant by 'rotationally spaced' rows;

Line 8, it is unclear as to what is meant by 'dwell positions'.

Claims 2-8, line 1, 'A' should be replaced with 'The'.

Claim 6, line 2, it is unclear as to what is meant by 'rotationally opposed'.

Claim 7, line 1, it is unclear as to what is meant by 'helix rotation'.

Claim 8, line 1, it is unclear as to what is meant by 'rotationally spacing' of the rows.

Claim 9, line 7, it is unclear as to what is meant by 'helix rotation';

Line 8, it is unclear as to what is meant by 'rotationally spaced';

Line 9, it is unclear as to what is meant by 'dwell positions'.

Claims 10-17, line 1, 'A' should be replaced with 'The'.

Claim 11, line 2, it is unclear as to what is meant by 'rotationally opposed'.

Claim 12, line 2, it is unclear as to what is meant by 'helix rotation';

Line 2, 'there are' would be more appropriately replaced with 'wherein said plurality of dwell positions include'.

Claim 13, line 1, it is unclear as to what is meant by 'helix rotation'.

Claim 14, line 2, 'said one end' lacks proper antecedent basis; should it be 'first' end?

Line 2, 'the first tufts' lacks proper antecedent basis;

Line 3, 'the second section' lacks proper antecedent basis;

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Lines 3, 5 and 7, it is unclear as to what is meant by 'rotationally spaced';

Line 4, 'the last tufts' lacks proper antecedent basis;

Line 4, 'the first section' lacks proper antecedent basis;

Line 5, 'the third section' lacks proper antecedent basis;

Line 6, 'the fourth section' lacks proper antecedent basis;

Line 8, it is unclear as to what is meant by 'dwell position'.

Claim 15, lines 2 and 3, it is unclear as to what is meant by 'helix rotation'.

Claim 16, line 1, it is unclear as to what is meant by 'helix rotation'.

Claim 17, line 2, 'said one end' lacks proper antecedent basis; should it be 'first' end?

Line 2, 'the last tufts' lacks proper antecedent basis;

Line 2, 'the second section' lacks proper antecedent basis;

Line 3, 'the first tufts' lacks proper antecedent basis;

Line 3, it is unclear as to what is meant by 'rotationally spaced';

Line 3, 'the third section' lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hothersall.

Hothersall discloses a spindle having first and second ends and a longitudinal axis (fig. 4, E).

Hothersall discloses bristles tufts arranged in sections along the length and dwell positions between adjacent sections (fig. 4, col. 2, lines 82-88).

With respect to claim 2, Hothersall discloses the rows being parallel to the longitudinal axis (col. 2, lines 84-85).

10. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hoover.

Hoover discloses a spindle having first and second ends and a longitudinal axis (fig. 2, #12).

Hoover discloses bristles tufts arranged in sections along the length and dwell positions between adjacent sections (fig. 2).

With respect to claim 2, Hoover discloses the rows being parallel to the longitudinal axis (fig. 2).

With respect to claim 5, Hoover discloses the rows being helically oriented (fig. 2).

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11. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(a,e) as being clearly anticipated by Brundula.

Brundula discloses a spindle having first and second ends and a longitudinal axis (fig. 1, #100).

Brundula discloses bristles tufts arranged in sections along the length and dwell positions between adjacent sections (fig. 1, #200,200A,300, col. 3, lines 47-59).

With respect to claim 2, Brundula discloses the rows being parallel to the longitudinal axis (fig. 1, #200,300).

With respect to claim 3, Brundula discloses the rows of each section rotationally spaced apart 180° (col. 3, lines 35-36).

With respect to claim 5, Brundula discloses the rows being helically oriented (col. 1, lines 38-40).

With respect to claim 6, Brundula discloses two rotationally opposed rows (col. 3, lines 35-36).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hothersall.

Hothersall discloses a similar brushroll however fails to disclose the rotationally spacing of the rows.

It would have been obvious to one of ordinary skill in the art to determine the most appropriate rotationally spacing in Hothersall to allow for the most effective agitation of a surface.

15. Claims 3-4, 6-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoover.

Hoover discloses a similar brushroll however fails to disclose the rotationally spacing of the rows.

With respect to claims 3-4, 6 and 11, it would have been obvious to one of ordinary skill in the art to determine the most appropriate rotationally spacing in Hoover to allow for the most effective agitation of a surface.

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With respect to claims 7-9 and 13, it would have been obvious to one of ordinary skill in the art to determine the most appropriate helical rotation in Hoover to allow for the most effective agitation of a surface.

With respect to claim 12, Hoover discloses the rows having the same direction of helix rotation and four dwell positions (fig. 2).

16. Claims 4, 7-10 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brundula.

Brundula discloses a similar brushroll however fails to disclose the rotationally spacing of the rows in adjacent sections.

With respect to claims 4, 11 and 17, it would have been obvious to one of ordinary skill in the art to determine the most appropriate rotationally spacing in Brundula to allow for the most effective agitation of a surface.

With respect to claims 7-9, 13-14 and 16, it would have been obvious to one of ordinary skill in the art to determine the most appropriate helical rotation in Brundula to allow for the most effective agitation of a surface.

With respect to claim 10, Brundula discloses four sections (fig. 1).

With respect to claim 12, Brundula discloses the rows having the same direction of helix rotation and four dwell positions (fig. 1).

With respect to claim 15, Brundula discloses rows on different halves of the spindle having different direction of helix rotation (fig. 1).

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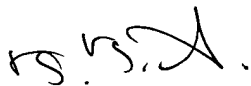
Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. D'Costa et al. discloses a brush roll with voids between bristle tufts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Wednesday-Friday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Theresa T. Snider
Primary Examiner
Art Unit 1744

TTS

12/12/03